

## **REMARKS**

Claims 1-40 have been canceled in favor of new claims 41-62, of which claims 41, 47, 52, and 58 are independent. The new independent claims are based largely upon previously presented claim 1 and further recite the presence of a leavening agent and a total protein content. These new limitations were originally found in original dependent claims.

In the Office Action dated August 18, 2006, claims 1-8, 20-27, and 39 were rejected under 35 U.S.C. 103(a) as being unpatentable over Marsland in view of Yajima et al., Chen et al, and Hamada et al. Claims 9-19, 28-30 and 40 were also rejected in view of these references and further in view of Haralampu.

Independent claims 41 (directed toward a bakery product) and 52 (directed toward a dough) recite that the compositions comprise vital wheat gluten, a chemical leavening agent, and a specialty wheat protein ingredient selected from the stated Markush group. The claims also recite that the product or dough comprises a total protein content of between about 4-18% by weight. Independent claims 47 and 58 are very similar, but instead recite the presence of yeast and a total protein content of between 5-35% by weight.

Marsland does not teach a food product comprising a chemical leavening agent *and* a protein content within this claimed range. In paragraph [0018], Marsland teaches that the food product may comprise greater than 25% by dry weight protein. Further, in all of the examples which employ a chemical leavening agent, the total protein content is well beyond the presently claimed range. With respect to claims 47 and 58, which require the presence of yeast, Marsland does not teach any yeast-leavened products, let alone one having a protein content of between 5-35% by weight. These shortcomings of Marsland are recognized by the Examiner in the Office Action.

The secondary references cited by the Examiner do not make up for or overcome the shortcomings in the Marsland teachings. Yajima does not teach the formation of a bakery product having the presently claimed protein content for both chemically-leavened and yeast-leavened products. Further, it would not have been obvious to combine the teachings of Yajima with those of Marsland in order to arrive at the presently claimed invention. The Examiner cited Yajima as disclosing the use of gliadin or glutenin in bakery products. However, there is not motivation or suggestion within Yajima to use such materials in bakery products that also contain vital wheat gluten, as presently claimed. In fact, at several places Yajima teaches away from the use of vital wheat gluten in favor of glutenin or gliadin. In col. 3, lines 63-67, Yajima discloses that a chewing gum analogue prepared using wheat gluten crumbles after a short chewing time, and when thermally treated, results in a product that is hard and rubbery and not gum-like. In col. 7, lines 45-47, Yajima teaches a batter compositions characterized by only containing the glutenin-rich fraction of wheat gluten. In col. 15, lines 51-56, Yajima teaches that the feature that the springiness does not deteriorate irrespective of the lowering of the pH value is the major characteristic of the fraction composed mainly of gliadin, which is not exhibited by whet gluten. Thus, the teachings of Yajima conflict with the presently claimed invention which utilizes both vital wheat gluten *and* a fractionated wheat protein product such as glutenin or gliadin.

Chen et al., cited by the Examiner as disclosing a process for denaturing wheat gluten, is devoid of any intelligible teachings regarding the use of the denatured wheat gluten in a bakery product using the claimed leavening agent and having a total protein content within the claimed range.

Hamada was cited as disclosing deamidated wheat gluten. Hamada does not disclose any particular bakery products made with the deamidated wheat gluten and certainly does not disclose its use with a bakery product having a total protein content within the presently claimed range.

Haralampu was cited as teaching the use of resistant starch. However, just like the other secondary references, Haralampu does not teach formation of a bakery product having the presently claimed protein level.

The Examiner argues in the Office action that it would have been obvious to vary the amount of protein to obtain the protein content wanted for the product. This statement is overly simplistic and is wholly unsupported by the teachings of the references which the Examiner relies upon to reject the present application. Marsland in paragraph [0004] recognizes the inherent difficulty in changing the formulations of traditional high-carbohydrate products to achieve a low-carbohydrate product.

The difficulty with enacting the necessary product formulation changes is that a change in food ingredients is usually not simple, or just an easy substitution of one ingredient for another. Foods must still be palatable and digestible, and the products must be capable of being successfully process on existing manufacturing equipment, ranging from home kitchen appliances to large industrial scale equipment. Additionally, this material technology must be balanced, for it needs to not only meet the requirements of the equipment, but it must ultimately yield a food product with taste, texture and mouth-feel characteristics similar to existing carbohydrate-based food products.

Thus, it is clear that one cannot simply “vary to amount of protein to obtain any desired amount of protein depending on the protein content wanted for the product” as the Examiner suggests. For example, using the logic propounded by the Examiner, if one desires a bakery product having a nearly 100% protein content, one could simply vary the amount of protein to achieve this result. However, it would be absurd to believe that such a product would be palatable or mimic the

desirable characteristics of conventional carbohydrate-based bakery products. Therefore, the prior art recognizes that amounts of ingredients and the very ingredients themselves are critical selections and not mere matters of choice or desire.

Applicants also submit that the Examiner in picking and choosing various “specialty” wheat proteins from an assortment of prior art references is applying an improper “obvious to try” standard in making the present rejections. MPEP 2145(X)(B) states that

The admonition that ‘obvious to try’ is not the standard under § 103 has been directed mainly at two kinds of error. In some cases, what would have been ‘obvious to try’ would have been to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful.... In others, what was ‘obvious to try’ was to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it.” *In re O’Farrell*, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988) (citations omitted).


The references cited in the present office action do not give an indication of which parameters are critical to the formation of a successful product and no direction as to which of the many possible choices is likely to be successful. Here, the prior art references only provide general guidance that certain specialty wheat proteins *may* be used in bakery products and doughs, but do not give any specific guidance as to *how* they may be used to achieve the present invention. One only needs to refer to the section of the Marsland reference quoted above to realize the importance of specific (as opposed to general guidance) that must be given when making substitutions of ingredients in food products if there is to be any reasonable expectation of arriving at an acceptable, working product.

In view of the foregoing, a Notice of Allowance appears to be in order and such is courteously solicited. Should the Examiner have any questions, please contact the undersigned at (800) 445-3460.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 19-0522.

Respectfully submitted,

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